

RESOURCE PROTECTION VS. RISK MANAGEMENT

Water Board site cleanup requirements are not satisfied by the risk management approach used by other agencies with human health protection mandates (e.g., DTSC, and USEPA). The risk management approach--minimizing exposure of human populations to site contaminants--does not fulfill the resource restoration and protection role of the Water Boards, established by statutes, regulations, and policies to protect California's valuable ground and surface water resources to meet the State's current and future water needs.

In California, water is a limited resource. Significant growth in the state's population has and will continue to exacerbate water supply problems. Future economic, social, and environmental well-being is dependent on the state's ability to provide adequate supplies of high quality water for beneficial uses. Demands on surface water resources have significantly outstripped supplies. Less water is available for cities and agriculture as we recognize the need for sufficient in-stream water supplies for aquatic life protection. In response to shrinking surface water supplies, California has placed increasing demands on its groundwater resources to supply safe and palatable drinking water as well as high quality water needed for agricultural and industrial uses. It is clear that *all* waters of the State—both surface and ground—that have the potential to be beneficially used will be so used in the foreseeable future.

For these reasons, California has developed a unique system for water resource protection. The Porter-Cologne Water Quality Control Act mandates that the State and Regional Water Boards regulate “those activities and factors which may affect the quality of waters of the state...to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental,

economic and social, tangible and intangible.” In the Act, the State Legislature “finds and declares that the people of the state have a primary interest in the conservation, control, and utilization of the water resources of the state, and that the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state.” “The Legislature further finds and declares that the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation originating inside or outside the boundaries of the state.”

Under this water resource protection mandate, the State and Regional Water Boards have adopted Water Quality Control Plans establishing standards for surface and groundwater quality, which include the designation of beneficial uses for each body of water that must be protected against impairment, water quality objectives designed to protect those uses, and implementation programs to attain compliance with the objectives. In addition, the State Water Board has adopted numerous regulations (in Titles 23 and 27 of the California Code of Regulations) and Policies for Water Quality Control—including the antidegradation policy (Resolution No. 68-16), sources of drinking water policy (Resolution No. 88-63) and the policy for investigation and cleanup of contaminated sites (Resolution No. 92-49)--which further guide the Regional Water Boards' water quality control programs, from a resource protection perspective.

To be able to ensure protection of both existing and probable future beneficial uses of California's ground and surface waters, the Water Boards' regulatory programs require dischargers of waste who have caused pollution or nuisance to clean up the wastes and abate the effects of those discharges so as to:

- 1) restore and protect the beneficial uses that have been designated in the Basin Plans,

- 2) eliminate present or potential hazards to health and the environment, and
- 3) reach the lowest levels of pollutants that are economically and technologically achievable.

California's needs and mandates for water resource protection are not satisfied by proposals to manage health risks while allowing plumes of polluted groundwater to remain beneath closed contaminated sites where restoration of the beneficial uses of these waters is achievable. Certainly it appears that leaving polluted water in place may be "a more reasonable and appropriate approach" to the party who caused the pollution and who is faced with the costs of cleanup. However, the Water Boards are obligated to consider the "maximum benefit to the people of the State" as a whole, when considering what degree of water quality degradation is reasonable. It appears not to be reasonable to allow plumes of polluted water to remain under a site where they may be pulled across property boundaries into adjacent clean waters by the installation of a heretofore unanticipated production well, installed by a neighboring land owner, farmer or municipality. It also appears not to be reasonable to take away the rights of that land owner, farmer or municipality to place that new production well, as the demand for additional water supplies increase, simply to permit avoidance of feasible cleanup costs by the responsible party.

Groups representing tank owners and other responsible parties favor compliance mechanisms that would allow sites to achieve closure and to reduce monitoring requirements. However, Water Boards cannot approve a site closure which frees a responsible party from liability while, at the same time, permit significant pollution to remain--pollution which adversely impacts the beneficial uses of that water now and in the future. If liability for future maintenance and monitoring is

to be truly eliminated, the responsible party must achieve full cleanup of the site to meet water quality, health, and other relevant environmental standards. Only in that way can the state be assured that continuing threats to our water resources do not remain.

To approve closure of a site which contains a plume of polluted groundwater, a prudent environmental regulatory agency would need to require a significant level of post-closure maintenance and monitoring to ensure that polluted groundwater does not spread to adjacent clean waters. Strict regulatory control on water users in the vicinity of the plume (thereby eliminating a portion of the water supply from use) would be needed to prevent the pollution from being pulled into new areas by changes in water use patterns. The boundaries of the plume would need to be continuously monitored to verify that pollutants are indeed not migrating. Such monitoring and maintenance would need to continue for as long as groundwater beneath the site remain polluted. In some cases, the long-term costs of such efforts could be greater than elimination of the pollution through active site cleanup.

If, as some have claimed, certain groundwaters that are currently designated for municipal or domestic supply have a very low probability of ever being used, and that the threat to actual usable or potentially usable water supplies is extremely low, then that condition should be formally recognized by the Regional Water Board either in a proposal to delist those beneficial uses from the Water Quality Control Plan, which involves a public process before the Board. In this manner, the public is fully involved in the process and is placed on notice that these waters are not to be protected for potential future use.